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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,604	07/16/2003	Jung-Hwan Kim	1349.1206	6533

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EXAMINER

LAXTON, GARY L

ART UNIT PAPER NUMBER

2838

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/619,604

Applicant(s)

KIM ET AL.

Examiner

Gary L. Laxton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-7 and 9-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7 and 9-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1, 3-7 and 9-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claim 3 is objected to because of the following informalities:

Claim 3 recites the limitation "the power supply leading in-terminal" in 3. There is insufficient antecedent basis for this limitation in the claim.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Shioya et al (US 6,088,244).

First switch (Q1), PWM unit (25), switch (SW1), controlling unit (PC, VFB, 19, 23), second switch (SW2).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-7, 9, 10 and 13-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shioya et al (US 6,088,244) in view of Johnson (US 6,801,730).

Claims 1, 4-7, 9, 10, 13, 25; Shioya et al disclose the claimed subject matter except for a USB interface unit. Shioya et al does disclose: rectifier (DB), transformer (T1), switch unit (Q1), PWM (25), control unit (PC, VFB, 19, 23).

Johnson teaches using a USB interface unit to communicate between a computer and printer in order to manage the power consumption of the system.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a system with a computer and printer and connecting the two by a USB port to form a printing system with power management as taught by Johnson et al.

Claims 14-24; Shioya et al disclose a system comprising: a signal processing unit; a printing unit; a DC/DC converter converting a power supply voltage into a lower voltage required by the signal processing unit, and outputting the converted voltage to the signal processing unit; an input unit receiving a printing command; and a power supply controlling device comprising a first switching unit, a pulse width modulating unit, a power supply switch providing a power on/off signal from a user, and a power supply controlling unit outputting a

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control signal to the pulse width modulating unit to control the first switching unit to perform an on/off operation corresponding to the power on/off signal from the user.

However, Shioya et al does not disclose connecting a printer and a host computer.

Johnson et al teach a system for power management comprising a host device (computer, USB port etc), connecting a printer (10) and managing the power.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a system with a computer and printer and connecting the two to form printing system with power management as taught by Johnson et al.

7. Claim 3, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shioya et al (US 6,088,244) and Johnson (US 6,801,730) in view of Komine (US 6,407,734).

Shioya et al and Johnson et al disclose the claimed subject matter in regards to claims 1 and 6 supra except for providing additional light emitting devices.

Komine teaches a system for a power circuit that changes states upon receiving signals via plural light emitting devices.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use plural light emitting devices in the circuit of Shioya et al and Johnson et al to relay different signals for controlling the state of the power circuit as taught by Komine.

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8. Claims 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shioya et al (US 6,088,244) in view of Watanabe et al (US 5,835,136).

Shioya et al disclose the claimed subject matter in regards to claim 26 supra except for putting the switch on the outside of a printer body.

Watanabe et al teach putting a switch on the outside of a printing unit in order for the user to be able to reach the switch to turn on the printer.

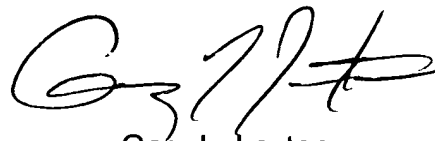
Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to put a power switch on the outside of the printer so the user can find the switch and turn the printer on .

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 5/16/05  
Gary L. Laxton  
Primary Examiner  
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